

Planned Updates to NGS Datasheet Format

In response to stakeholder and NGS staff concerns, NGS has developed several modifications to the format of the NGS datasheet—the primary method for accessing the passive control network of the National Spatial Reference System (NSRS). Many developers use NGS datasheets in their products, and NGS recognizes the importance of keeping the public informed of datasheet format changes.

Below is a summary of datasheet changes scheduled to be implemented by the end of calendar year 2011, as well as sample datasheets incorporating those changes. Please note: the new NGS datasheet will be version 8.00.

Yellow highlights in the mockups indicate format changes.
Blue highlights are hyperlinks of which some are not yet available.

1. Above the Coordinate Box

COUNTRY field has been added.

2. Coordinate Box

- a. ELLIPSOID HEIGHT has been moved from below the coordinate box to inside the coordinate box.
Designated as ELLIP HT
- b. Geometric EPOCH DATE has been moved from below the coordinate box to inside the coordinate box.
Designated as EPOCH
- c. DATUM TAG has been added for “a.” and “b.” above.
- d. Descriptors are added, therefore, hyphens and data have been shifted to the right. Some examples are:
 1. NAD 83(2007) POSITION-
 2. NAD 83(2007) ELLIP HT-
 3. NAVD 88 ORTHO HEIGHT-
- e. Orthometric Height Epoch Date (if applicable) has been removed from the end of the NAVD 88 line to its own line, just below, with the following descriptor:
NAVD 88 EPOCH-YYYY.xx
- f. The orthometric height datum field will now include a hyperlink, in addition to the specific datum referenced by the point. The link will take the viewer to a page on the NGS website that explains the origin of the specific datum used.

3. Below the Coordinate Box

- a. A note (if applicable) has been added when the geoid height computed from the most current geoid model differs from the geoid height used to determine the published orthometric height, as below.
NOTE: NAVD 88 ortho height was determined from prior model GEOID03.
- b. If applicable, the geoid model used to determine the published GPS-derived orthometric height has been added.
GEOID03 HEIGHT- -22.75 (meters)
- c. The geoid height computed from the most current geoid model now follows the geoid height noted in “b.,” above. The descriptor has been changed, therefore, the hyphen has been shifted to the right.
GEOID09 HEIGHT- 22.80 (meters)
- d. X, Y, and Z coordinates follow the published geoid height. The descriptors have been changed, therefore, hyphens have been shifted to the right.
NAD 83(2007) X- -1,994,789.496 (meters) COMP
NAD 83(2007) Y- -4,697,388.731 (meters) COMP
NAD 83(2007) Z- 3,815,306.819 (meters) COMP
- e. LAPLACE CORR: the hyphen has been shifted to the right.

4. Accuracies

The algorithm used to compute accuracies published as a result of the 2007 Readjustment has been modified. The caption will now read, as follows:

1. FGDC Geospatial Positioning Accuracy Standards (95% confidence, cm)
2. North and East Accuracies have been combined into a single horizontal quantity, denoted as ‘Horiz.’
3. The median local accuracy is now included, as well as a hyperlink to a complete list of all network connections and their local accuracies.
4. The median distance between a station and stations directly connected to it has been added and is denoted as “Dist (km).”

5. Superseded Survey Control Section

- a. The geoid model used to determine the superseded GPS-derived orthometric height will be shown. In order to provide space, the datasheet will no longer provide a meters-to-feet conversion.

Previous datasheet versions looked like this:

NAVD 88 (06/22/05) 1.96 (m) 6.4 (f) GPS OBS

The new version will appear as follows:

NAVD 88 (03/14/97) 1485.51 (m) GEOID96 model used GP(epoch [if applicable])

- b. Where applicable, the epoch of the orthometric height will be indicated.